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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,280	10/06/2000	David B. Dwyer	H0001181	8489

128 7590 01/14/2004

HONEYWELL INTERNATIONAL INC.
101 COLUMBIA ROAD
P O BOX 2245
MORRISTOWN, NJ 07962-2245

EXAMINER

TRAN, DALENA

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/680,280

Applicant(s)

DWYER ET AL.

Examiner

Dalena Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT	PAPER
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23

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

DETAILED ACTION

Notice to Applicant(s)

1. This office is responsive to the amendment filed on 10/10/03. As per request, claims 1,11,18,23,28,38-39, and 43 have been amended. Thus, claims 1-51 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-5,8-9,11-15,28-32,35-36,38-42,45-46, and 48-51, are rejected under 35 U.S.C.102(e) as being anticipated by Deker et al. (6,181,987).

As per claims 1,11,28, and 51, Deker et al. disclose a navigation system, comprising: a display device that includes a graphical display portion and a textual display portion (see column 4, lines 36-42), and logic for operating the graphical display portion and the textual display portion of display device, logic presenting a textual display of an original flight plan and a modified flight plan in the textual display portion while simultaneously presenting a graphical display of the original flight plan in the graphical display portion (see column 4, lines 36-63; column 7, lines 34-38; and column 8, lines 7-19).

As per claims 39-40, Deker et al. disclose a display device (see column 5, lines 5-23), logic for operating a graphical display portion and the textual display portion of display device, logic presenting a textual display of comparative data for an original flight plan and a modified

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flight plan in the textual display portion while simultaneously presenting a graphical display of the original flight plan in the graphical display portion (see column 4, lines 36-63; columns 6-7, lines 66-15; and column 8, lines 7-19).

As per claims 2,12, and 29, Deker et al. disclose the textual display presented by logic comprises a textlist of waypoints that are on the original flight plan and a modified flight plan, and performance data for common waypoints that are both the original flight plan and a modified flight plan (see column 4, lines 43-48; and column 8, lines 13-19).

As per claims 3-4,13-14,30-31, and 41, Deker et al. disclose the textual display presented by logic further comprises performance data for waypoints that are added to the modified flight plan (see column 7, lines 50-53), and the performance data for each common waypoint comprises performance data for the waypoint on the original flight plan and for the waypoint on the modified flight plan (see column 7, lines 5-15).

As per claims 5,15,32, and 42, Deker et al. disclose an interface device that allows an operator to change the modified flight plan (see column 7, lines 39-53), and logic updates the performance data on the textual display for common waypoints when the modified flight plan is changed (see column 7, lines 54-67).

As per claims 8,35, and 45, Deker et al. disclose a graphical display of the original flight plan and the modified flight plan is simultaneously presented on display device together with the simultaneously textual display of the original flight plan and the modified flight plan (see column 8, lines 7-19).

As per claims 9,36, and 46, Deker et al. disclose interface device allows an operator to change the modified flight plan on either the textual display or the graphical display (see column

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1, lines 37-64), and the graphical display of the modified flight plan is updated when the modified flight plan is changed (see column 7, lines 39-67), a graphical display of the original flight plan and the modified flight plan is simultaneously presented on display device together with the simultaneously textual display of the original flight plan and the modified flight plan (see column 8, lines 7-19).

As per claim 38, Deker et al. disclose a navigation system, comprising: a CPU, and a flight control system that controls an airplane based on inputs from CPU (see the abstract; and column 3, lines 5-29), a display device (see column 2, lines 22-29), logic for operating a graphical display portion and the textual display portion of display device, logic presenting a textual display of an original flight plan and a modified flight plan in the textual display portion while simultaneously presenting a graphical display of the original flight plan in the graphical display portion (see column 4, lines 36-63; column 7, lines 34-38; and column 8, lines 7-19), wherein CPU provides inputs to flight control system based on navigational data corresponding to the original flight plan that is presented on display device (see column 2, lines 1-21; and lines 30-60).

As per claim 48, Deker et al. disclose a textual display presented by logic comprises a textlist of waypoints that are on the original flight plan and a modified flight plan, and performance data for common waypoints that are both the original flight plan and a modified flight plan (see column 4, lines 43-48; and column 8, lines 13-19).

As per claim 49, Deker et al. disclose logic produces a textlist by merging the original flight plan and the modified flight plan, with the textlist displaying waypoints that have been added in the modified flight plan and waypoints that are removed from the original flight plan,

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and the textlist being displayed on the textual display portion of display device (see column 4, lines 43-48; column 5, lines 28-40; column 6, lines 17-25; column 7, lines 50-53; and column 8, lines 13-19).

As per claims 50, Deker et al. disclose the modified flight plan is a pilot-created flight plan achieved by changing waypoints on the original flight plan (see column 6, lines 14-16, and lines 25-32).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-7,10,16-17,33-34,37,43-44, and 47, are rejected under 35 U.S.C.103(a) as being unpatentable over Deker et al. (6,181,987) in view of Lions (4,086,632).

As per claims 6,16,33, and 43, Deker et al. do not disclose logic designates on the textual display waypoints to be removed. However, Lions discloses logic designates on the textual display waypoints to be removed, which correspond to waypoints that are on the original flight plan but not on the modified flight plan (see columns 7-8, lines 36-51; and columns 10-11, lines 62-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Deker et al. by combining logic designates on the textual display waypoints to be removed, which correspond to waypoints that are on the original flight plan but not on the modified flight plan for updating the new flight plan, and provide a clear view of the flight plan for the operator.

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As per claims 7,17,34, and 44, Deker et al. do not disclose modified flight plan is activated to become a new original flight plan. However, Lions discloses modified flight plan is activated to become a new original flight plan, logic removes from the textual display the waypoints that are designated to be removed (see the abstract; and columns 11-12, lines 38-26). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Deker et al. by combining modified flight plan is activated to become a new original flight plan, logic removes from the textual display the waypoints that are designated to be removed for avoiding confusion to the operator and recognize a new flight path.

As per claims 10,37, and 47, Deker et al. disclose interface device allows an operator to change the modified flight plan on either the textual display or the graphical display (see column 1, lines 37-64), and the graphical display of the modified flight plan is updated when the modified flight plan is changed (see column 7, lines 39-67), a graphical display of the original flight plan and the modified flight plan is simultaneously presented on display device together with the simultaneously textual display of the original flight plan and the modified flight plan (see column 8, lines 7-19). Deker et al. do not disclose when the modified flight plan is activated to become the new flight plan, the graphical display is updated to display only the new original flight plan. However, Lions discloses when the modified flight plan is activated to become the new flight plan, the graphical display is updated to display only the new original flight plan (see columns 9-10, lines 20-38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Deker et al. by combining when the modified flight plan is activated to become the new flight plan, the graphical display is updated to display

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only the new original flight plan to avoid unnecessary waypoints left in the screen display to confuse the pilot.

6. Claim 18 is method claim corresponding to system claims 1 and 11 above. Therefore, it is rejected for the same rationales set forth as above.

Claim 19 is method claim corresponding to system claims 2 and 12 above.

Claim 20 is method claim corresponding to system claims 3 and 13 above.

Claim 21 is method claim corresponding to system claims 4 and 14 above.

Claim 22 is method claim corresponding to system claims 5 and 15 above.

Claim 23 is method claim corresponding to system claims 6 and 16 above.

Claim 24 is method claim corresponding to system claims 7 and 17 above.

Claims 25-27 are method claims corresponding to system claims 8-10 above. Therefore, they are rejected for the same rationales set forth as above.

Remarks

7. Applicant's argument filed on 10/10/03 have been fully considered but they are not deemed to be persuasive, the references cited still the same. However, there are some changing of the claims cited between columns and lines as above.

8. Applicant's argument, that the Deker reference does not disclose logic presenting a textual display of an original flight plan and a modified flight plan in the textual display portion while simultaneously presenting a graphical display of the original flight plan in the graphical display portion. However, Deker does disclose that in column 4, lines 36-65 (in figure 2, screen 11, window 27 and 28 are displayed simultaneously); column 7, lines 34-39; and column 8, lines 7-19.

In column 4, lines 36-65, when the system is activated, the screen 21 show 2 windows at the same time (a graphic window 27, and a textual window 28), in the graphic window 27, show the flight plan followed by the aerodyne (column 4, lines 61-62); in the textual window 28, show a number of parameters on the flight plan followed by the aerodyne as well as the diversion flight plan, and these parameters relate for example to the distance still to be traveled, the amount of time required, the volume of fuel remaining (column 4, lines 43-49). Therefore, Deker does disclose logic presenting a textual display of an original flight plan and a modified flight plan in the textual display portion while simultaneously presenting a graphical display of the original flight plan in the graphical display portion.

In column 7, lines 34-39, Deker discloses “the graphic window 27 shows the first diversion flight plan in the list of the flight plan solutions.... while the textual part 28 gives the significant parameters enabling the active flight plan to be compared with the diversion flight plan”; and also in column 7, lines 5-15, Deker discloses for each flight plan, the significant parameters are the list of the way points,....., as well as the estimated volume of fuel remaining, etc.....; therefore, it is obvious that Deker does disclose logic presenting a textual display of an original flight plan and a modified flight plan in the textual display portion while simultaneously presenting a graphical display of the original flight plan in the graphical display portion.

In column 8, lines 7-19, Deker discloses in figure 4, screen 40, show the graphic window 27 and the textual window 28 at the same time, the graphic window 27 show the original flight plan (column 8, lines 10-12), and the textual window 28 show the original and modified flight plan (lines 17-19). Therefore, it is obvious that Deker does disclose logic presenting a textual

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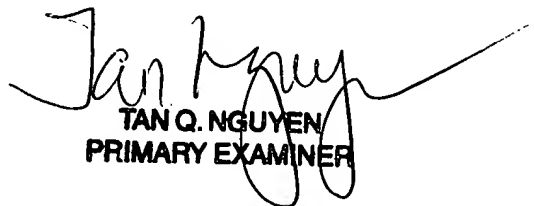
display of an original flight plan and a modified flight plan in the textual display portion while simultaneously presenting a graphical display of the original flight plan in the graphical display portion.

Therefore, the references cited still read the claim invention.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 703-308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.


TAN Q. NGUYEN
PRIMARY EXAMINER

/dt
January 7, 2004